



From panel to analysis and beyond

Enterprise Genomic Solutions

Let QIAGEN be your
technical development
partner with our Enterprise
Genomic Solution's offering



Sample to Insight

Enterprise Genomic Solutions - Your Biomarker Discovery Partner

Biomarker discovery is expanding at a very fast pace due to developments in high-throughput NGS. This expansion is driving a significant need for customized NGS solutions in translational and clinical research to study larger cohorts or serve an expanding universe of diseases. Designing and verifying highly customized NGS solutions demands a significant amount of time, investment, and expertise, and doesn't always work out.

Tailored Custom Solutions

This is not just an assay development service – we develop and optimize a solution that combines the power of QIAGEN's chemistry of panel design and bioinformatics pipelines and perform on-site training to ensure adoption.

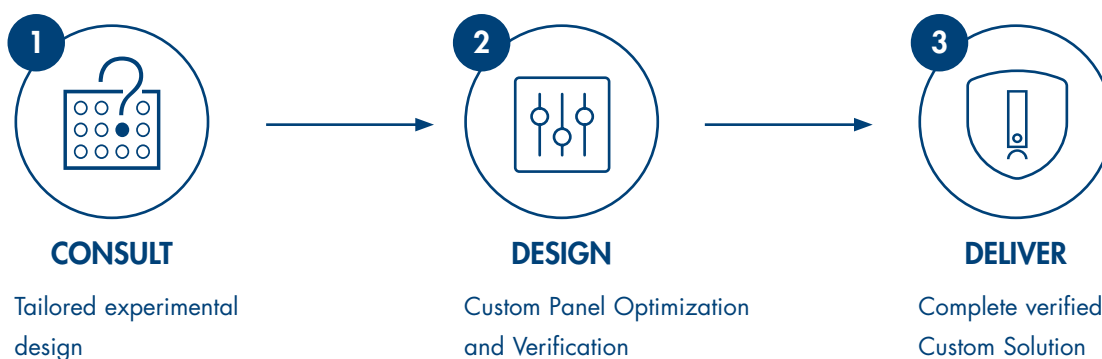
Featured Researcher - Dr Fergus Couch

Study Objective: Determine whether inherited germline mutations in cancer predisposition genes are associated with increased risks of pancreatic cancer in a large cohort of patients (>3000), effectively and efficiently, as quickly as possible.

Challenges:

- Panel Design - A 2-primer design is used; in-house design approach took 9 months (Couch lab), results were less than favorable due to lack of uniformity; could not proceed using this method.
- Bioinformatics - Deep bioinformatics expertise required to build a robust pipeline in order to analyze thousands of data sets with a complex library structure.
- Automation - High-throughput requirements to support automation of workflow.

The QIAGEN Solution: QIAGEN delivered a customized solution within 3 months; Customized QIAseq DNA panel, with enough reagents for entire study on an automated platform. Publication in JAMA in less than 18 months (JAMA. 2018 Jun 19;319(23):2401-2409.)



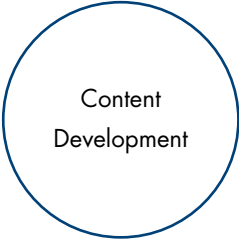
Please contact us at: Info.EGS@qiagen.com

QIAGENs chemistry builds precision into sequencing analysis

Enterprise Genomic Solutions takes QIAGEN's existing custom panel design services to a new level. We leverage our extensive and respected Knowledge Base and incorporate wet-lab optimization, verified bioinformatics solutions, and customer-optimized reagent packaging to accelerate the creation and adoption of custom NGS workflows.

Be part of the Genomic revolution, partner with QIAGEN's 20 year's experience in sample to insight solutions. Get repeatable and reproducible insights into your results.

Unique Molecular Index (UMI) are molecular tags that are used to detect and quantify unique mRNA transcripts. They play an important role in the correction of PCR-introduced errors for more accurate variant calling. UMIs enable correction of PCR-introduced bias to deliver more accurate transcript quantification



Content Development

Query QIAGEN's knowledge base to rapidly identify the most relevant biomarkers for your research application.


- Integrated published knowledge
- Organized knowledge and ontology
- Synthesize with content aware analytics



Panel Development

Accelerate the development and optimization of your customized NGS panel with QIAGEN's lab services.

- Dry lab design using proprietary QIAseq UMI and SPE chemistries
- Wet lab verification on your samples or ours
- Panel performance verification



Data Analysis

Develop robust bioinformatics pipeline through EGS.

- Pipeline development service (QCI-AU)
- Assay verification (QCI-AU)
- Interpretation set up (QCI-I)



Data Interpretation

Determine biological relevance of your biomarkers by querying QIAGEN's knowledgebase.

- Evidence-based software (QCI) – assists in classification and reporting from any NGS platform
- Comprehensive annotation and literature resource
- Customized reporting

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